

JAN 25 2002

1012937

## Summary of Safety and Effectiveness

### Knee Module for the StealthStation® System

- I. Company:** Medtronic Surgical Navigation Technologies  
826 Coal Creek Circle  
Louisville, CO 80027  
(720) 890-3200
- II. Product Name:** Knee Module for the StealthStation® System
- III.** This submission describes a modification to the StealthStation® System FluoroNav™ Module to provide for image guided knee surgery and orthopedic indications.
- IV.** The indications for use for the Knee Module for the StealthStation® System are as follows:

The StealthStation® System is intended as an aid for precisely locating anatomical structures in either open or percutaneous procedures. The StealthStation® System is indicated for any medical condition in which the use of stereotactic surgery may be appropriate, and where reference to a rigid anatomical structure, such as the skull, a long bone, or vertebra, can be identified relative to a CT or MR based model or fluoroscopy images of the anatomy.

Example procedures include, but are not limited to:

**Cranial Procedures:**

Cranial biopsies  
Tumor resections  
Craniotomies/ Craniectomies  
Skull base procedures  
Thalamotomies/Pallidotomies  
Pituitary Tumor Removal  
CSF Leak Repair

**Spinal Procedures:**

Spinal implant procedures, such as  
pedicle screw placement.

**ENT Procedures:**

Transphenoidal procedures  
Intranasal procedures  
Orbital Decompression Procedures  
Optic Nerve Decompression Procedures  
Polyposis Procedures  
Endoscopic Dacryocystorhinostomy  
Encephalocele Procedures  
Sinus procedures, such as Maxillary  
antrostromies, Ethmoidectomies,  
Sphenoidotomies/Sphenoid explorations,  
Turbinate resections, and Frontal sinusotomies

**Orthopedic Procedures:**

Total Knee Arthroplasty (Primary  
and Revision)  
Unicompartmental Knee  
Arthroplasty

- V.** The Knee Module for the StealthStation® System was shown to be substantially equivalent to the original StealthStation® System, the FluoroNav™ Module for the StealthStation® System and the Orthopilot® System. Performance data was provided to support the claim of substantial equivalence.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

**JAN 25 2002**

Victoria G. Rendon  
Clinical and Regulatory Affairs Associate  
Medtronic Surgical Navigation Technologies  
826 Coal Creek Circle  
Louisville, Colorado 80027

Re: K012937

Trade Name: Knee Module for the Stealthstation® System  
Regulation Number: 882.4560  
Regulation Name: Stereotaxic instrument  
Regulatory Class: II  
Product Code: HAW  
Dated: November 26, 2001  
Received: November 27, 2001

Dear Ms. Rendon:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

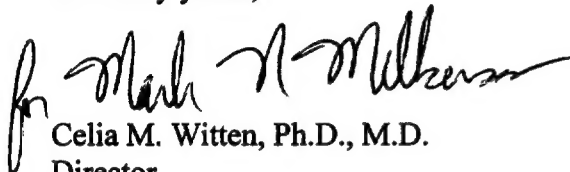
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "for Mark N. Miller", is written over the typed name of the official.

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

510(k) Number (if known): K012937Device Name: Knee Module for the StealthStation® System**Indications For Use:**

The StealthStation® System is intended as an aid for precisely locating anatomical structures in either open or percutaneous procedures. The StealthStation® System is indicated for any medical condition in which the use of stereotactic surgery may be appropriate, and where reference to a rigid anatomical structure, such as the skull, a long bone, or vertebra, can be identified relative to a CT or MR based model or fluoroscopy images of the anatomy.

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Sinus procedures, such as Maxillary antrostomies, Ethmoidectomies, Sphenoidotomies/Sphenoid explorations, Turbinate resections, and Frontal sinusotomies

**Orthopedic Procedures:**

Total Knee Arthroplasty (Primary and Revision)

Unicompartmental Knee Arthroplasty

*for Mark N. McNamee*  
(Division Sign-Off)

Division of General, Restorative  
and Neurological Devices

510(k) Number K012937

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

\_\_\_\_\_  
Concurrence of CDRH, Office Of Device Evaluation (ODE)

Prescription Use ☒  
(Per 21 CFR 801.109)

OR

Over-The-Counter Use \_\_\_\_\_

(Optional Format 1-2-96)